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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SHINGLES, KRISTIE D

ART UNIT PAPER NUMBER

2141

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/942,822	Applicant(s) FAGUNDO ET AL.	
	Examiner Kristie Shingles	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

*Applicant has no amended claims.
Claims 1-29 are pending.*

Response to Arguments

1. Applicant's arguments, see Remarks filed on 10/17/2005, with respect to the rejections of claims 1-29 under USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of *Benfield et al* (US 2003/0009551).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1-7, 13, 14, 16-19, 22-24 and 26-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Benfield et al* (US 2003/0009551) in view of *March et al* (US 20030007486).

a. **Per claim 1**, *Benfield et al* teach a method for translating between logical addresses and ports of a first network and a logical address and ports of a second network connected to the first network at an intermediate device, the method comprising the computer-implemented step of:

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- receiving at the intermediate device a first packet from a first device having a first address on the first network (paragraphs 0040, 0045, 0050-0054, 0058, 0141, 0142; intermediate device receives a message from an endpoint);
- sending a second packet to a second device on the second network in response to receiving the first packet, the second packet including, in a source address field, data indicating a particular address of the intermediate device on the second network (Figure 2G, paragraphs 0052-0054, 0058, 0074, 0108, 0135; another message is sent another device from the intermediate device subsequent to receiving the first message from the first device);
- determining whether the first packet includes a first message that registers a first resource on the first device with a protocol server for a particular protocol, the protocol server available at the second device on the second network (paragraphs 0045, 0065-0067, 0072-0073, 0104, 0126-0129); and
- if it is determined that the first packet includes the first message registering the first resource, then determining first information in the first message for uniquely requesting the first resource, and storing data indicating the first information in a first data structure in association with the first address (paragraphs 0061, 0071-0078, 0080, 0095-0098, 0104, 0126, 0127).

Benfield et al teach the provision for network address translation (paragraphs 0083 and 0084) fail to explicitly teach translating between logical addresses and ports of a first network and a logical address and ports of a second network connected to the first network at an intermediate device. However, *March et al* disclose network address and/or port translation between devices and receiving data units on one or more networks with a source address and port and a destination address and port and sending a second packet to a second device on the second network in response to receiving the first packet, the second packet including, in a source address field, data indicating a particular address of the intermediate device on the second network. Specifically, a message is sent to a second server of a second network, wherein the message contains source, port and destination address data (Abstract, Figure 1, paragraphs 0006, 0007, 0024 and 0126-0153).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Benfield et al* and *March et al* for the purpose of implementing network address and/or port translation in order to conceal the network addresses of nodes in private networks and to enable address translations between the public and private networks by reusing a pool of private addresses in different private networks. Also, it is obvious to include source and destination information in packets transmitted over a network for tracking purposes.

b. **Claims 16 and 26-29** contain limitations that are substantially equivalent to claim 1 and are therefore rejected under the same basis.

c. **Per claim 2**, *Benfield et al* and *March et al* teach the method as recited in Claim 1, *March et al* further teach the method further comprising the computer-implemented step of: receiving at the intermediate device a third packet from a third device on the second network (Figures 1 and 2, paragraphs 0006, 0020-0041, 0124, 0181 and 0182); determining whether the third packet includes a second message requesting a second resource according to the particular protocol (paragraphs 0007, 0022, 0024, 0032-0035, 0041-0054, 0070-0084 and 0142); and if it is determined that the third packet includes the second message requesting the second resource, then determining second information in the second message for uniquely requesting the second resource (paragraphs 0120, 0126, 0141 and 0142), determining whether the second information matches the first information in the data structure (paragraphs 0035-0084), and if the second information matches the first information, sending the second message to the first device having the first address associated with the first information (paragraphs 0084 and 0085).

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d. **Per claim 3**, *Benfield et al* and *March et al* teach the method as recited in Claim 1, *March et al* further teach the method, wherein, if it is determined that the first packet includes the first message, then inserting in the second packet a second message based on the first message (paragraphs 0054, 0104, 0105 and 0110-0121).

e. **Claim 17** is substantially equivalent to claim 3 and is therefore rejected under the same basis.

f. **Per claim 4**, *March et al* teach the method as recited in Claim 3, wherein the second message is the same as the first message (paragraphs 0053-0055).

g. **Claim 18** is substantially similar to claim 4 and is therefore rejected under the same basis.

h. **Per claim 5**, *March et al* teach the method as recited in Claim 3, further comprising the computer-implemented step of generating the second message by replacing, in a source address field, data indicating the first address with data indicating the particular address of the intermediate device on the second network (paragraphs 0033-0035, 0085, 0086, 0089 and 0105).

i. **Claim 6** is substantially similar to claims 3 and 5 and is therefore rejected under the same basis.

j. **Per claim 7**, *Benfield et al* and *March et al* teach the method as recited in Claim 1, *March et al* further teach the method, wherein the particular protocol uses a well-known port for requesting the first resource (paragraphs 0031-0035, 0053, 0088 and 0089).

k. **Claim 19** is substantially similar to claim 7 and is therefore rejected under the same basis.

l. **Per claim 13**, *March et al* teach the method as recited in Claim 2, wherein the third packet includes, in a destination address field, data indicating the particular address of the intermediate device (paragraphs 0043-0054).

m. **Claim 22** is substantially similar to claim 13 and is therefore rejected under the same basis.

n. **Claims 14 and 23** are substantially similar to claims 7 and 13 and are therefore rejected under the same basis.

o. **Per claim 24**, *Benfield et al* and *March et al* teach the method as recited in Claim 16, *March et al* further teach the method wherein the first device obtains the first information from a protocol server that is not on the first network (Figure 1, paragraphs 0006 and 0018-0022).

4. **Claims 8-12, 15, 20, 21 and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Benfield et al* (US 2003/0009551) and *March et al* (US 2003/0007486) in view of *Gurijala et al* (USPN 6,601,090).

a. **Per claim 8**, *Benfield et al* and *March et al* teach the method of Claim 1 as applied above, yet fail to explicitly teach the method as recited in Claim 1, wherein the particular protocol is a network basic input and output system (NetBIOS) open protocol. However, *Gurijala et al* teach support of the NetBIOS protocol with the use of the object caching system, which comprises a cache name server and plurality of web cache servers (Abstract and col.4 lines 19-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Benfield et al* and *March et al* with *Gurijala et al* for the purpose of extending the compatibility of the system to support the NetBIOS standard protocol which serves to activate network operations on IBM compatible computing devices operating under MS-DOS or some version of UNIX; because it would enhance the system to be able to provide name registration and services while allowing for requests of the lower-level network services to conduct sessions between networked nodes.

b. **Claims 9, 20 and 25** are substantially similar to claim 8 and are therefore rejected under the same basis.

c. **Per claim 10**, *Benfield et al* and *March et al* teach the method as recited in Claim 1, *March et al* further teach the method, wherein the first information is a resource name (col.4 lines 8-18 and col.5 lines 10-15; *Benfield et al*: paragraphs 0050, 0058, 0065, 0126).

d. **Claim 21** is substantially similar to claim 10 and is therefore rejected under the same basis.

e. **Per claim 11**, *Benfield et al* and *March et al* teach the method Claim 5 as applied above, yet fail to explicitly teach the method as recited in Claim 5, wherein the protocol server is a name server that stores a resource name of the first resource in the second message in association with an address based on data in the source address field of the second message. However, *Gurijala et al* teach a cache name server that stores the resource/object name in a second message or object request that also includes the URI or IP address of the requested object, data is not stored in a port field (col.2 lines 44-55, col.4 lines 8-18, col.5 lines 7-24, col.5 lines 55-65 and col.6 lines 31-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Benfield et al* and *March et al* with *Gurijala et al* for the purpose of recording and maintaining an updated account of resource locations in a server for use in generating messages to the right resource providers; because the efficiency of the system to access resources, depends on the resources being properly associated with their corresponding addresses and to remedy or update any inconsistencies of misinformation.

f. **Claim 12** is substantially similar to claim 11 and is therefore rejected under the same basis.

g. **Per claim 15**, *Benfield et al* and *March et al* teach the method of Claim 1 as applied above, yet fail to explicitly teach method as recited in Claim 1, further comprising the computer-implemented steps of: monitoring messages associated with registering the first resource with the protocol server; determining whether the first resource is not registered with the protocol server; and if it is determined that the first resource is not registered with the protocol server, then removing from the first data structure the data indicating the first information in association the first address. However, *Gurijala et al* teach determining that a resource is not present in the CNS—cache name server—database after searching for the requested resource, removing the information identifying the location of the resource and, if later found in a different location, replacing it with updated information (col.5 line 26-col.6 line 21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Benfield et al* and *March et al* with *Gurijala et al* for the purpose of maintaining an updated account of resource locations in a server for efficient accessibility of the resource. Because network resources change frequently, it is important to keep a current entry of where the resource is and to remove or revise its old information.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: *Traversat et al* (US 2002/0184310), *Ullman* (US 2002/0112051), *Bender* (US 6,366,561), *Meandzija et al* (US 2003/0018772), *Gasbarro et al* (US 6,948,004).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
Art Unit 2141

kds


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